

Title (en)

DEVICE AND PROCESS FOR LASER-WELDING PIPES.

Title (de)

VORRICHTUNG UND VERFAHREN ZUM LASERSCHWEISSEN EINES ROHRES.

Title (fr)

DISPOSITIF ET PROCEDE POUR LE SOUDAGE PAR LASER D'UN TUBE.

Publication

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Application

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Priority

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- DE 9100597 W 19910723

Abstract (en)

[origin: WO9203248A1] Described is a device for laser-welding pipes (14) round the inside of the pipe ends, with a probe which can be inserted in the pipe (14) and with at least one imaging element (41, 65) to focus and deviate a laser beam (57) travelling inside the probe (1) substantially along the longitudinal axis (10) of the probe (1). The imaging elements (41, 65) produce a focussed, deviated laser beam (59) at a focal point (F) lying outside the probe (1), the direction of propagation of the beam being inclined at an angle to the longitudinal axis (10). This reduces the thermal load on the imaging elements (41, 65) inside the probe (1) as well as the tendency of the welding materials to deposit on the inside of the probe.

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